

WHAT IS CLAIMED IS:

1. A device for applying varnish to an electric wire, comprising:

a trough-like container located below the electric wire
5 in the prescribed moving direction so as to correspond to said electric wire; and

varnish dropping means located above the electric wire
so as to correspond to said electric wire and including a tank
for storing the varnish, a supplying tube which is communicated
10 with the tank and through which the varnish is supplied and
a flow-rate adjusting means for adjusting the flow-rate of the
varnish to be dropped,

wherein the electric wire is movable in a prescribed
moving direction at a prescribed speed, and said varnish
15 dropping means drops a desired quantity of varnish toward the
outer surface of the electric wire which is moving at the
prescribed speed through the flow-rate adjusting means so that
an insulating layer of varnish having a uniform thickness is
formed on the outer surface of the electric wire.

2. A device for applying varnish to an electric wire according
to claim 1, wherein said electric wire is one of a plurality
of electric wires, and said trough-like container and said
varnish dropping means are provided so as to correspond to said
25 plurality of electric wires.

3. A device for applying varnish according to claim 1, wherein said electric wire is moved at a speed of 3 - 120 m/minute, and said varnish is composed of the resin component which is a compound of one or two kinds of resins of polyamide, epoxy, polyimide, etc. and the solvent of cresol, xylene, xylol, ethylbenzene, phenol, methanol, ethanol, water, etc., the varnish W being composed of the resin component of 10 - 30 % by weight and solvent of 70 - 90 % by weight, and the varnish W has a viscosity of 1.0 - 35.0 dPa · s.

4. A device for applying varnish according to one of claims 1, wherein at a tip of said container in the moving direction of the electric wire, an applying dice through which the electric wire is passed is attached to a dice holder.

5. A device for applying varnish according to claim 1, wherein said container is detachably attached to an attaching plate provided upright on a tray through a holder.

6. A device for applying varnish according to claim 1, further comprising a drying furnace for drying and baking the varnish applied on the outer surface of the electric wire at the rear end of said dice holder.

7. A device for applying varnish according to claim 1, wherein said flow-rate adjusting means includes

a dropping nozzle attached to the tip of said supply tube;
an operating knob provided outside the dropping nozzle,
the inner aperture of the nozzle being adapted to be adjustable;
a nozzle holder fit in the outer surface of the dropping
5 nozzle, and

a guiding member having a \supset shape in section, the guiding
member being slidably fit in the outside of the nozzle holder
in a direction orthogonal to the moving direction of the electric
wire.

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8. A method of applying varnish on an electric wire comprising
the steps of:

moving an electric wire in a prescribed direction at a
predetermined speed;

15 dropping a prescribed quantity of varnish toward the
electric wire, the prescribed quantity of varnish being adjusted
using a nozzle; and

applying the varnish onto the outer surface of the electric
wire to form an insulating layer of the varnish having a uniform
20 thickness.

9. A method of applying varnish on an electric wire according
to claim 8, wherein said electric wire is one of a plurality
of electric wires, and said varnish is dropped independently
25 toward each of said plurality of electric wires.

10. A method of applying varnish on an electric wire according to claim 7, wherein said electric wire is moved at a speed of 3 - 120 m/minute, and said varnish is composed of the resin component which is a compound of one or two kinds of resins of polyamide, epoxy, polyimide, etc. and the solvent of cresol, xylene, xylol, ethylbenzene, phenol, methanol, ethanol, water, etc., the varnish W is composed of the resin component of 10 - 30 % by weight and solvent of 70 - 90 % by weight, and the varnish W has a viscosity of 1.0 - 35.0 dPa · s.

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